

WHAT IS CLAIMED IS:

1. A method for setting the system parameters of a scanning microscope comprising the steps of:
 - Controlling an acquisition of an image of a specimen with a control computer,
 - Inputting at least one image quality feature after an image of the specimen is acquired;
 - Converting the at least one image quality feature into at least one system parameter of the scanning microscope by the control computer; and
 - Setting the at least one system parameter.
2. The method as defined in Claim 1, wherein an image quality feature concerns the noise of the detected image data or the signal-to-noise ratio of the detected image data or the bleaching behavior of a fluorescent marking of a specimen or the detection speed of an image data set to be detected or the contrast or resolution.
3. The method as defined in Claim 1, wherein a system parameter of the scanning microscope concerns the power level of a light source or the wavelength of a light source or the scanning speed of a scanning unit or the diameter of a confocal detection pinhole or the amplifier characteristic of a confocal detector or the number of individual images to be detected for averaging of an image.
4. The method as defined in Claim 1, wherein an inputted image quality feature, upon conversion into system parameters of the scanning microscope, influences or modifies several system parameters of the scanning microscope.

5. The method as defined in Claim 1, wherein the system parameters calculated and presently set by the control computer of the scanning microscope are outputted and/or displayed to the user for information.
6. The method as defined in Claim 1, wherein the image quality expected to be achievable, for the image quality features presently selected, in the next acquired image is calculated and outputted and/or displayed to the user, preferably graphically, in particular in color.
7. The method as defined in Claim 6, wherein a color indication is displayed
 - in red if the selected system parameter setting is contradictory or results in information losses;
 - in yellow if the calculated system parameter setting generates artifacts;
 - or
 - in green if the selected system parameter setting appears useful.
8. The method as defined in Claim 1, wherein the number of images of the same (preferably fluorescent-marked) specimen still expected to be detectable is outputted and/or displayed to the user.
9. The method as defined in Claim 8, wherein for calculation of the number of images of the same specimen still expected to be detectable, the images hitherto detected are taken into account, with consideration of the system parameter setting applicable in the context of the particular detection.
10. The method as defined in Claim 1, wherein each image quality feature is set using a control element provided for it, for example using a joystick or a trackball.

11. A method for setting the system parameters of a scanning microscope, comprising the steps of:
 - Controlling an acquisition of an image of a specimen with a control computer;
 - Modifying at least one image quality feature after an image of the specimen is acquired;
 - Simulating the acquisition of a further image in the context of a modified system parameter; and
 - Displaying the simulated further image to the user.
12. The method as defined in Claim 11, wherein the simulation encompasses the optical imaging process of the scanning microscope and preferably is based on the image of the specimen already detected.
13. The method as defined in Claim 11, wherein the user causes a further image acquisition to be performed with the scanning microscope in the context of modified system parameters, or modifies at least one further system parameter.
14. The method as defined in Claim 11, wherein the simulation is accomplished on the control computer of the scanning microscope and/or on a further computer connected thereto.
15. A scanning microscope comprising: a control computer for controlling, an operating console for inputting at least one modified image quality feature after an image of the specimen is acquired, whereby the at least one image quality feature can be converted by the control computer into at least one system parameter of the scanning microscope that can be set.

16. A scanning microscope as defined in Claim 15, wherein the scanning microscope is a confocal scanning microscope.
17. A scanning microscope comprising: a control computer for controlling an acquisition of an image of a specimen with the scanning microscope, an operating console for inputting at least one modified image quality feature after an image of the specimen is acquired, means for simulating the acquisition of a further image in the context of a modified system parameter; and an output console for displaying the simulated further image to the user.
18. A scanning microscope as defined in Claim 17, wherein the scanning microscope is a confocal scanning microscope.